

NORTH MEXICO OIL CONSERVATION COMMISSION
MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR C WELL

Form C-122

0151
File

Type Test ☒ Initial ☐ Annual ☐ Special						Test Date 01/01/1992			
Company Yates Petroleum Corp				Connection Natural Gas Pipeline Co of America					
Pool Atoka				Formation Crozier Bluff				Unit	
Completion Date 09/01/1991		Total Depth 11400		Plug Back TD 10822		Elevation 3153		Farm or Lease Name South Avalon MA Federal	
Csg Size 5.500	Wt 20.000	d 4.778	Set At 11388	Perforations: From 10556 To 10610		Well No 1			
Tbg Size 2.875	Wt 6.500	d 2.441	Set At 10490	Perforations: From 10556 To 10610		Unit 1	Sec 14	Twp 21S	Rge 26E
Type Well Single				Packer Set At 10490		County Eddy			
Producing Thru Tubing		Resv Temp. °F 210 @ 10951		Mean Temp. °F 62		Baro. Press. - Pa 24.0		State New Mexico	
L 10490	H 10490	Gg 0.743	%CO ₂ 0.182	%N ₂ 5.060	%H ₂ S 0.000	Prover 0.000	Meter Run 2.000	Taps Flange	

FLOW DATA						TUBING DATA		CASING DATA		Duration of Flow	
NO	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. hw	Temp °F	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.		Temp. °F
SI	0.000	x	0.000	0	0.0	0	590	0			0
1	2.067	x	0.500	440	3.0	52	525	62			24
2	2.067	x	0.500	440	5.0	55	497	62			24
3	2.067	x	0.500	440	6.0	53	468	62			24
4	2.067	x	0.500	440	9.0	51	440	62			24
5.		x									

RATE OF FLOW CALCULATIONS							
NO	Coefficient (24 Hour)	$\sqrt{hwPm}$	Pressure Pm	Flow Temp. Factor Ft	Gravity Factor Fg	Super Compress Factor, Fpv	Rate of Flow Q, Mcfd
1	1.189	37.3	464.0	1.0078	1.160	1.061	55
2	1.189	48.2	464.0	1.0048	1.160	1.060	71
3	1.189	52.8	464.0	1.0068	1.160	1.060	78
4	1.189	64.6	464.0	1.0088	1.160	1.061	95
5							

NO	Pr	Temp °R	Tr	Z	Gas Liquid Hydrocarbon Ratio 0	Mcf/bbl.
					A.P.I. Gravity of Liquid Hydrocarbons 0.000	Deg.
1	0.70	512	1.32	0.888	Specific Gravity Separator Gas 0.743	XXXXXXXXXX
2	0.70	515	1.32	0.891	Specific Gravity Flowing Fluid XXXXXXXXXX	0.743
3	0.70	513	1.32	0.889	Critical Pressure 659	P.S.I.A. 659
4	0.70	511	1.31	0.888	Critical Temperature 389	°R 389
5						

Pc	614.0	Pc ²	377.0	
NO	Pt ²	Pw	Pw ²	Pc ² - Pw ²
1	301.4	549.0	301.4	75.6
2	271.4	521.1	271.5	105.5
3	242.1	492.1	242.1	134.8
4	215.3	464.1	215.4	161.6
5				

(1) $\frac{Pc^2}{Pc^2 - Pw^2} = 3.574$

AOF = Q $\left[\frac{Pc^2}{Pc^2 - Pw^2} \right]^n = 178$

(2) $\left[\frac{Pc^2}{Pc^2 - Pw^2} \right]^n = 2.515$

Absolute Open Flow	178	Mcfd @ 15.025	Angle of Slope	0 36	Slope, n	0.724
Remarks						

Approved By Commission:	Conducted By: Ed Perry	Calculated By: Andrea Carpenter	Checked By:
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